REPORT

OF THE

DEPARTMENT OF HEALTH

OF THE

PANAMA CANAL

FOR THE

MONTH OF NOVEMBER, 1916

D. C. HOWARD

Lieut. Colonel, Medical Corps, United States Army Chief Health Officer, Balboa Heights, Canal Zone

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WASHINGTON 1917



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LETTER OF TRANSMITTAL.

THE PANAMA CANAL, CANAL ZONE HEALTH DEPARTMENT, Balboa Heights, Canal Zone, December 9, 1916.

Lieut. Col. Chester Harding, Acting Governor, The Panama Canal, Balboa Heights, Canal Zone.

Sir: I have the honor to submit the following report of the operations of the department of health for the month of November, 1916. Very respectfully,

D. C. HOWARD.

Chief Health Officer

GENERAL REMARKS.

The general health of employees and nonemployees in the Canal Zone and terminal cities has continued good.

A case of smallpox was admitted to Ancon Hospital on November 2, 1916, from Panama City, in a West Indian sailor who was discharged from the British steamship Coya on October 18, 1916. The disease was contracted before his arrival on the Isthmus. This ship had called at Peruvian ports on her trip north, and took an original bill of health at Salaverry, Peru; she sailed from that port on October 11, 1916; called at Eten, Peru, and sailed on October 13, 1916. The patient was isolated in Ancon Hospital and is now convalescent. All known contacts were immediately vaccinated and isolated, and other usual precautions taken. The adult contacts had been protected by vaccination, but there were three young children contacts who had never been vaccinated. The first vaccinations were unsuccessful. On November 21 the second case appeared in a child "contact"—daughter of the first patient admitted. On November 23, a third case appeared in an infant "contact," living in an adjoining room of the same house. No further cases have developed. Of the three cases treated in Ancon Hospital, the first two are now convalescent, and the third (6) weeks old infant) died November 30. Previous to the above the last case of this disease brought to the Isthmus was in February, 1915; the last case originating on the Isthmus was in 1907.

The annual physical examination of gold employees was commenced during the month. This year these examinations have been made by a permanent personnel of physicians, clerks, and attendants detailed for that purpose, and proceeding from one station to another as the work requires. Formerly the examinations were made by the district physicians in connection with their

regular duties. The present plan is resulting in more uniformity in the examination and is being accomplished more rapidly and

with less inconvenience to the employees concerned.

No diseases of a quarantinable nature, other than the smallpox cases mentioned above, originated on or were brought to the Isthmus during the month.

VITAL STATISTICS.

The following statistics are based upon the number of names appearing on the rolls for the preceding month, which was 35,031. The total number of admissions to hospitals and quarters was 922, a rate of 315.83, as compared with 282.76 for the preceding

month, and 311.01 for the corresponding month of last year.

The total number of deaths from all causes was 13; of these, 9 were from disease, giving a death rate of 3.08, as compared with 5.77 for the preceding month and 5.96 for the corresponding month of last year.

The constantly noneffective rate was 8, as compared with 8.16 for the preceding month and 9.79 for the corresponding period of

last year.

The total admission rate for malaria, hospitals and quarters, was 5.48, as compared with 13.71 for the preceding month, and 22.09 for the corresponding month of last year. The constantly non-effective rate for malaria was 0.24, as compared with 0.50 for last

month and 0.70 for the month of November last year.

The diseases causing the highest admission rates to hospital, in the order of their numerical importance, were: (1) Venereal diseases, (2) malaria, (3) tuberculosis, (4) bronchitis, and (5) pleurisy. These five diseases caused 22 per cent of all admissions to hospitals. Eight and one-half per cent of all admissions to hospitals were caused by venereal diseases; malaria causing 4 per cent of all admissions.

There were two admissions for typhoid fever during the month, giving an admission rate of 0.68, as compared with 0.72 for the preceding month. There were no admissions for typhoid during November, 1915.

Effects of Race.

The admission rate to hospital, and the death rate from disease, for black employees, were 65.68 and 3.56, respectively, as compared with 66.82 and 5.84 for the preceding month and 133.23 and 6.88 for the corresponding month of last year. For white employees the admission rate to hospital and the death rate from disease were 250.05 and 0.00, respectively, as compared with 359.63 and 5.29 for the preceding month, and 365.77 and 0.00 for the corresponding month of last year.

The constantly noneffective rates were 6.53 for blacks and 17.43

for whites.

The admission rate to hospital and quarters for malaria was 5.14 for blacks and 7.65 for whites, as compared with a rate of 7.93 for

¹ All morbidity and mortality rates are computed as equivalent annual per 1,000.

blacks and 47.40 for whites for last month, and 17.41 for blacks and

52.25 for whites for the corresponding month of last year.

There was one death among American employees during the month, giving a rate of 2.84, as compared with 2.85 for last month, and 5.82 for the month of November of last year.

DEPORTATIONS.

There were seven deportations accomplished during the month, five employees (for injury 1, for disease 4) and two nonemployees.

CANAL ZONE.

EMPLOYEES AND NONEMPLOYEES.

The population of the Canal Zone, according to the last police census taken in June, 1916, is 31,048. This includes employees, nonemployees, and military garrisons residing or stationed within the Canal Zone. Among this population there were 24 deaths during the month of November, 20 of which were from disease, giving a death rate of 7.73, as compared with 9.66 for the preceding month and 11.14 for the corresponding month of last year.

Of the total deaths from disease the percentage under 5 years

of age was 20, as compared with 32 for last month.

There were 54 births reported, giving a rate of 20.87; of these 14

were white and 40 colored.

There were three deaths of children under 1 year of age, all colored, giving an infant mortality rate, based upon the number of births reported for the month, of 0 for white and 75 for colored children, with a general average of 56.

The percentage of stillbirths to total births was 7.

PANAMA CITY.

EMPLOYEES AND NONEMPLOYEES.

The population of the city is 60,778, among whom there were 182 deaths during the month of November; of these 176 deaths were from disease, giving a rate of 34.75, as compared with 29.62 for the preceding month and 27.63 for the corresponding month of last year.

Of the total deaths from disease the percentage under 5 years

of age was 52, as against 47 for last month.

The principal causes of death as compared with last month were as follows:

•	October.	Novem- ber.
Tuberculosis (various organs) Diarrhea and enteritis (under 2 years) Broncho-pneumonia	31 26 16	28 24 17

There were 220 births reported, giving a rate of 43.44. There were 75 deaths under 1 year of age, giving an infant mortality rate based on the number of births reported for the month of 345.

The percentage of stillbirths to total births was 8.

COLON.

EMPLOYEES AND NONEMPLOYEES.

The population of the city is 24,693, among whom there were 53 deaths during the month of November; of these 52 deaths were from disease, giving a rate of 25.27, as compared with 30.13 for the preceding month and 20.87 for the corresponding month of last year.

Of the total deaths from disease the percentage under 5 years of age was 43, as compared with 43 for the preceding month.

The principal causes of death as compared with last month were as follows:

	October.	Novem- ber.
Broncho-pneumonia. Chronic nephritis. Tuberculosis (various organs).	12 7 10	7 7 5

There were 73 births reported, giving a rate of 35.48. There were 16 deaths under 1 year of age, giving an infant mortality rate, based on the number of births reported for the month, of 219.

The percentage of stillbirths to total births was 6.

DIVISION OF HOSPITALS.

ANCON HOSPITAL.

The average number of patients constantly in the hospital proper during the month was 423, as compared with 416 for the preceding month, and 458 for the corresponding period of last year. The average number of days treatment per employee was 19.98. The daily per capita cost per patient for October was \$1.64 gross.

Thirty-six cases of malaria were admitted against 52 for October, 62 for September, 124 for August, and 143 for July. Seven deaths occurred from tuberculosis against 5 in October and 13 in September.

Detailed statistics are shown in Table XIII.

Board of health laboratory.—The usual routine work has been continued during the month—Two deaths in cattle from the Corozal farm were found to be due to Texas cattle fever, as a result of laboratory examinations.—This is the first record of this disease on the Isthmus, so far as known.

Corozal Hospital.—The average number of insane patients constantly cared for during November was 315, as compared with 310 for last month and 254 for the corresponding month of last year.

During the month there were 21 admissions, 7 deaths, 11 discharges, and no transfers. The daily per capita cost for October was \$0.49 gross.

Detailed statistics are shown in Table XIII.

Chronic ward.—During the month there were 10 admissions, no deaths, and 3 discharges. The average number of patients constantly cared for was 21.77. The daily per capita cost for October was \$0.36.

COLON HOSPITAL.

The average number of patients constantly in hospital was 43, as compared with 38 for the preceding month and 23 for the corresponding month of last year. The average number of days' treatment per employee was 9.25. The daily per capita cost per patient for October was \$2.27 gross.

Detailed statistics are shown in Table XIV.

PALO SECO LEPER ASYLUM.

The average number of patients constantly cared for during the month was 68.56, as compared with 67.67 for the preceding month and 57.40 for the corresponding month of last year. During November there was one admission and no deaths or discharges. The daily per capita cost per patient for October was \$0.75 gross.

Detailed statistics are shown in Table XV.

SANTO TOMAS HOSPITAL.

One thousand three hundred and seventy-one patients were treated in the hospital during the month of November as compared with 1,414 for the preceding month and 1,388 for the corresponding month last year. The daily average number of patients treated was 450, as compared with 440 for last month and 453 for the month of November last year. The total number of days treatment was 13,340 as compared with 13,657 for last month.

The number of deaths was 97, with tuberculosis of the lungs, diarrhea, and enteritis (under 2 years), and congenital debility

the chief causes in the order named.

Twelve cases of dysentery were treated during the month, with no deaths; 10 cases of pneumonia, with 1 death. There were no admissions for typhoid fever during the month.

Detailed statistics are shown in Table XVI.

DISTRICT DISPENSARIES.

The dispensary having the highest admission rate for malaria was Gatun with an average weekly percentage of 0.11. There were no admissions for malaria among the employees of the Culebra-Empire district during the month.

Detailed statistics are shown in Table IX.

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ZONE SANITATION.

CANAL.

The energies of this division are directed chiefly toward the control of malarial fever, which has been responsible for the noneffective rate among employees to a greater extent than any other disease. The work has been so far successful that—as noted elsewhere in this report—there are now occasional months during which malaria takes second or third place in the list of causes for admissions to sick report. The extermination of malarial fever in a given district is best accomplished by the elimination of mosquitoes, and this is effected in a large measure by destruction of mosquito larvæ. During November the residence districts have been almost free from mosquitoes, due to the fact that the usual measures employed by this division were supplemented by the very heavy rains, which flush out the streams, pools, and various other breeding places, destroying the larvæ. A few mosquitoes are present at all times in all districts and the search for their breeding places by the district inspectors is based on the reports from the board of health laboratory as to the kinds of mosquitoes present. These reports indicate that we have present certain kinds, the larvæ of which are not destroyed by oiling the surface of the breeding places (thus preventing them from obtaining oxygen) and which are not vulnerable to any of our present modes of attack.

A recent and very comprehensive publication on mosquitoes (The Mosquitoes of North and Central America and the West Indies, by Howard, Dyar & Knab), referring to the habits of the larvæ, says, "Some, indeed, never rise to the surface and obtain the necessary oxygen from the water by osmosis, or in the case of Mansonia, from the vascular roots of aquatic plants." Fortunately, these species which are not reached by the usual methods directed toward the elimination of mosquitoes, have not been incriminated as carriers of disease, but they are annoying and, for this department, they complicate the problem of the absolute elimination of the mosquito.

There have been no epidemics on the Zone during the month, but sporadic cases of communicable diseases have been reported as follows:

Diarrhea	2 4	Measles. Tuberculosis (various organs) Typhoid fever.	7
maiariai iever	20		

PANAMA.

For the month Santo Tomas Hospital reported 16 admissions for malaria and Ancon Hospital 6 admissions, making a total of 22 cases. Compared with the corresponding month of 1915 there were 20 cases chargeable to Panama and in November, 1914, 167 cases.

There have been 4 cases of diphtheria reported during the month with 1 death. The same routine was employed as heretofore, including hospitalization of cases, the taking of throat cultures from all contacts, their restriction for 10 days following exposure, etc.

Two cases of typhoid fever were reported during the month with no deaths. Both cases were in West Indians residing in the section of the city known as Guachapali, but no connection could be traced between them. In both cases the source of infection

was undetermined.

A bureau of child hygiene was inaugurated under the direction of this office during the month. One registered nurse was assigned to the work and Santo Tomas Hospital was made a central head-quarters for the time being. The plan is to take a certain number of infants from birth and by instruction of the mothers as to proper feeding, bathing, clothing, and general care trace them for an indeterminate period. Visits are made to homes and one afternoon per week an opportunity for consulting a hospital physician is afforded. The goal sought is the lowering of the infant mortality rate in this city which has for years been excessive.

The following is taken from the report of the registered nurse

in charge:

From the 11th, when the work commenced, to the end of the month 61 babies' histories were taken and appropriate instruction covering feeding, care of mouth, eyes, and general hygiene was given to the mothers who in the main evinced considerable interest. The first four days the attending nurse worked exclusively at the station (Santo Tomas Hospital) but beginning on November 15 she began visits in the city in the follow-up campaign and from then until November 30, 37 babies were visited in their homes. On the weekly day for physician's inspection, 17 babies were brought in; 2 it was deemed necessary to treat. Two infants who were being artificially milk fed were returned to the breast. Although in its beginning, the future outlook in this work is encouraging.

The following communicable diseases were reported during the month:

Beri-beri 3 Smal Chiekenpox 4 Syph Diphtheria 4 Searl Dysentery 2 Typh Malaria 22 Tube Measles 9 Teta Meningitis 3 Whote Pellagra 1	ilis. et fever. loid coid crulosis 25	7 1 2 8 2
---	---------------------------------------	-----------

COLON.

The activities of the health department have been along the usual lines during the month. Good progress has been made in the permanent antimosquito work that has been under way in the Cristobal and Mount Hope districts. Several large swamp areas have been filled and the drainage facilities improved by laying tile and cementing ditches.

The following notifiable diseases were reported during the month:

Chickenpox	1	Measles	1
Malaria	10	Pneumonia	1
Diphtheria	2	Whooping cough	3
Tuberculosis	5	Yaws	1

QUARANTINE SERVICE.

The quarantine transactions during the month on the Atlantic side were conducted without special incident, and no special changes have been noted in conditions on the Atlantic side in South America and West Indian Islands. No further reports of yellow fever at Barbados have been received since the report of six cases

occurring in September.

Quarantine conditions along the west coast of South America show little change except in Guayaquil, Ecuador, where the usual seasonal increase in both the yellow fever and plague is now manifesting itself. No cases of yellow fever have been reported at Buenaventura, Colombia, for some months, and the reports of the inspectors on the steamship Jamaica and the steamship Balboa would indicate that no cases actually exist at the present time in this port, although sanitary conditions are such that its reappearance at any time could not be considered as unlooked for. One case of bubonic plague was reported in a white sailor on the steamship Santa Rita, the infection in this case evidently having been received in the small port of Caldera, Chile. This man was removed to the Lazareto, in Callao, Peru, where the case terminated fatally. Smallpox is reported as being more than usually prevalent along the coast of Peru and Ecuador.

Supervision has been maintained over the inspection of animals at the abattoir at Cristobal during the month, and condemnations of meat made in accordance with the Federal Meat Inspection regulations. Quarantine inspection of 718 cattle was made, of which 156 were local inspections for shipments across the Panama Railroad. Quarantine inspections at the Cristobal abattoir were made on 1,023 cattle and 2 sheep; the routine procedure of inspection at the abattoir includes the microscopic examination of splenic smears. Anthrax occurred on pastures 59, 56, and 35 during the month of this report. The total number of deaths on these pastures was 13. One animal from pasture lower 59 died in the car at the abattoir. No deaths have occurred since the 22d of the month. The outbreak of anthrax referred to, occurring between November 11 and 22, was apparently caused by overcrowding of pastures 35, 56, and 59. This situation has been relieved.

TABLE I.—ADMISSIONS, DEATHS, AND NONEFFECTIVE RATES FOR EMPLOYEES; DEATHS OF RESIDENTS OF PANAMA, COLON, AND THE ZONE.

ABSOLUTE NUMBERS.

	Num-	h	nission ospital		De	eaths		tive	effec- from ness.
	ber of em- ploy- ees.	Total.	Disease.	External causes.	Total.	Disease.	External causes.	Days treated.	Constantly non- effective.
November, 1916.						-			
WhiteColored	4, 703 30, 328	117 259			1 12		1 3	2,459 5,945	81.98 198.15
Total	35, 031	376	264	112	13	9	4	8, 404	280.13
October, 1916.						-			
WhiteColored	4, 538 28, 734	151 245	136 160	15 85	4 15	2 14	2 1	2,125 6,292	68. 55 202. 96
Total	33, 272	396	296	100	19	16	3	8, 417	271.51
November, 1915.									
WhiteColored	4, 593 29, 631	140 329		21 95	2 21	0 17	2 4	2,362 7,692	78. 72 256. 39
Total	34, 224	469	353	116	23	17	6	10, 054	335.11
I	PROPOR	TIONA	TE NU	MBERS	3,1				
November, 1916.									
White Colored	4, 703 30, 328	298. 53 102. 48	250.05 65.68	48.48 36.79	2.55 4.75	3.56	$2.55 \\ 1.19$		17.43 6.53
Total	35, 031	128.80	90.43	38.37	4.45	3.08	1.37		8.00
October, 1916.									
White Colored	4, 538 28, 734	399. 29 102. 32	359. 63 66. 82	39.66 35.50	10.58 6.26	5. 29 5. 84	5. 29 . 42		15.10 7.06
Total	33, 272	142.82	106.76	36.06	6.85	5.77	1.08		8.16
November, 1915.									
White	4, 593 29, 631	365.77 133.23	310.91 94.76	54.86 38.47	5. 23 8. 50	6.88	5. 23 1. 62		17.14 8.65

¹ Annual average per 1,000.

8.06 5.96 2.10

9.79

TABLE I.—DEATHS OF RESIDENTS OF THE CITIES OF PANAMA, COLON, AND THE CANAL ZONE—Continued.

Place.	Popula-		Death	s.	Annual average per 1,000.			
	tion.	Total.	Dis- ease.	External causes.	Total.	Dis- ease.	External causes.	
November, 1916.								
Panama Colon Canal Zone	60, 778. 24, 693 31, 048	182 53 24	176 52 20	6 1 4	35.93 25.76 9.28	34.75 25.27 7.73	1.18 .49 1.54	
Total	116, 519	259	248	11	26.67	25.54	1.13	
October, 1916.								
Panama Colon Canal Zone	60,778 24,693 31,048	156 64 28	150 62 25	6 2 3	30.80 31.10 10.82	29.62 30.13 9.66	1.18 .97 1.62	
Total	116, 519	248	237	11	25.54	24.41	1.13	
November, 1915.								
Panama Colon Canal Zone	60, 373 29, 331 31, 219	146 53 34	139 51 29	7 2 5	29.02 21.68 13.06	27.63 20.87 11.14	1.39 .81 1.92	
Total	120, 923	233	219	14	23.12	21.73	1.39	

TABLE II.—DEATHS BY AGE, COLOR, AND SEX.

	White.		Colored.			Yellow.			Total.			
	Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.	Total.
Under 1 year. 1 to 4 years. 5 to 10 years. 10 to 20 years. 21 to 30 years. 31 to 40 years. 41 to 50 years. 51 to 60 years. 61 to 70 years. 71 to 80 years. 81 to 90 years.	6 1 5 3 1 3 2	3 1 1 1 3 	9 2 1 1 8 3 2 4 2	50 13 3 2 17 18 15 4 1 2	33 11 2 5 13 13 4 6 4	83 24 5 7 30 31 19 10 5 2 2	1 1 1 1 1 1 1	1	1 2 1 1 1 1 1	57 15 3 2 23 22 17 8 3 3	36 13 3 6 16 13 5 7 4	93 28 6 8 39 35 22 15 7
Total	21	12	33	125	93	218	7	1	8	153	106	259

TABLE III.—DEATHS BY NATIONALITY.

	Emp	oloyees.	Nonen	aployees.	To	tals.	Grand
	Male.	Female.	Male.	Female.	Male.	Female.	total.
Colombia. Costa Rica. Demarara. Ecuador England Greece. Grenada.	1 3 1		1 2 19 7 7 9 1 1 1 3 3 3 8 8 3 1 1 1 1 1 1 1 1 1 1 1	2 11 1 13 13 1 3 3 1 1 1 1 2 2 2 1 3 5 1 1 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 2 25 7 7 9 1 1 1 1 3 3 41 1 1 3 3 3 1 2 6 6 1 1 2 5 1 1 3 3	2 11 1 13 3 3 3 1 1 1 1 2 2 2 1 3 5	1 4 366 8 8 222 11 3 11 11 11 1 1 1 1 1 1 1 1 1 1 1
Total	13		140	106	153	106	· 259

TABLE IV.—DEATH RATE AMONG AMERICANS ON THE ISTHMUS CONNECTED WITH THE PANAMA CANAL.

	Number of deaths.	Annual average per 1,000.
White employees from the United States (4,221): External causes	1	2. 84
White women and children from the United States (3,918)		
White employees and their families from the United States (8,139): External causes.	1	1. 47
Total number of Americans on the Canal Zone, including soldiers and their families (17,203): Disease.	1	. 70
External causes	$\hat{2}$	1.39
Total	3	2.09

TABLE V.—CAUSES OF DEATHS OF EMPLOYEES OF THE PANAMA CANAL AND PANAMA RAILROAD CO.

-	White.	Colored.	Total.
Disease.			
Tuberculosis of the lungs. Disseminated tuberculosis. Lobar pneumonia. Organic diseases of the heart Chronic nephritis. Pyæmia, streptococcic Rupture of aortic aneurysm into pericardium External causes.		1 2 1 1	2 1 1 2 1 1 1
Drowning, accidental Accidental traumatism Suicide—hemorrhage from incised wound.		2 1	2 1 1
Total	1	12	18

TABLE VI.—CAUSES OF DEATHS OF CIVIL POPULATION (EMPLOYEES AND NONEMPLOYEES) AND MILITARY AND PLACES WHERE CHARGEABLE.

		na-	Col	on.	Ca: Zo:		Tot	als.	tal.
	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Grand total
General diseases. Malarial fever, estivo-autumnal. Smallpox. Whooping cough. Diphtheria and croup. Dysentery. Purulent infection and septicemia. Pyemia. Septicemia. Tetanus. Pellagra Beriberi. Tuberculosis of the lungs. Acute miliary tuberculosis. Tuberculosis meningitis. Disseminated tuberculosis. Syphilis, tertiary Syphilis, hereditary. Cancer and other malignant tumors of stomach and liver. Cancer and other malignant tumors of the peritoneum, intestines, rectum. Cancer and other malignant tumors of the female genital organs. Cancer and other malignant tumors of the female genital organs.	1 1 1 13 1 2 1 5	1 1 1 2 1 11 3	3		1 1 2	1	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1 1 1 1 1 1 2 2 2 2 2 2 3 1 8 1 1 1 3 1 1 3 1 1 1 3 1 1 1 1 3 1

TABLE VI.—CAUSES OF DEATHS OF CIVIL POPULATION (EMPLOYEES AND NONEMPLOYEES) AND MILITARY AND PLACES WHERE CHARGEABLE—Continued.

		na- ia.	Col	lon.		nal ne.	Tot	als.	tal.
	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Grand total
General diseases—Continued.									
Cancer and other malignant tumors of other organs and of organs not specified. Diabetes. Other general diseases.	1	1	1				2 1		2 1 1
Diseases of the nervous system and of the organs of special sense.									
Encephalitis. Simple meningitis. Locomotor ataxia. Other diseases of the spinal cord Cerebral hemorrhage, apoplexy. Epilepsy. Convulsions of infants (under 5 years).	1 1	1 1			····· 1		1 1 1 1 1 1	1 1 1	1 1 1 2 2 2
Diseases of the circulatory system.									
Pericarditis. Acute endocarditis Organic diseases of the heart. Diseases of the arteries, atheroma, aneu-	1 3	3	i	2	3		1 7	1 5	2 1 12
Diseases of the arteries, atheroma, aneurism, etc	1 3	3	····				1 4	3	1 7
Diseases of the respiratory system.									
Acute bronchitis. Chronic bronchitis. Broncho-pneumonia Lobar pneumonia. Other diseases of the respiratory system		10 4	3 2 2 3	2 2 5	i		5 2 10 6	4 2 15 4	9 4 25 10
(tuberculosis excepted)	1				••••		1		1
Diseases of the digestive system. Acute gastritis	,						1		1
Diarrhea and enteritis (under 2 years) Colitis Appendicitis and typhlitis	16	8	2				1 18 2	10	28 2
Hernia, intestinal obstructions. Intestinal obstruction Simple peritonitis (nonpuerperal).		1	i				1 1	î 1	1 2 1 1
Nonvenereal diseases of the genito-urinary system and annexa.									
Acute nephritis	5 7	1 3	5	$\frac{1}{2}$	2	1	5 14	2 5 1	7 19 1

TABLE VI.—CAUSES OF DEATHS OF CIVIL POPULATION (EMPLOYEES AND NONEMPLOYEES) AND MILITARY AND PLACES WHERE CHARGEABLE—Continued.

		na- 1a.	Co	lon.		nal ne.	То	tals.	al.
	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Grand total
The puerperal state.									
Puerperal hemorrhage Other accidents of labor Puerperal septicemia Eclampsia		1		i		2		2 1 2 2	2 1 2 2
Diseases of the skin and of the cellular tissue.									
Gangrene		1						1	1
Malformations.									
Congenital malformations (stillbirth not included)	1						1		1
Diseases of early infancy.									
Premature birth Congenital debility Malnutrition Other causes peculiar to early infancy Lack of care	2	3 1	 1		1		5 2 6 1	3 1	5 2 9 2
Affections produced by external causes.									
Suicide by firearms	1						1		1
ments. Conflagration Accidental drowning Traumatism by fall Railroad traumatism Homicide by firearms.	i	1	1 		3		1 5 1 1	1 1	1 5 1 1
Ill-defined diseases.									
Infections of undetermined origin	1						1		1
Total	105 12	77 5	30	23 4	18	6 4	153 13	106 13	259 26
Grand total	117	82	30	27	19	10	166	119	285

19

DEATHS OF NONRESIDENTS.

Residence.	Nationality.	Color.	Sex.	Age.	Diagnosis.
Interior of Panama.	Martinique	Black	Male	44	Pulmonary tuber-
Do	Panama	do	do	22	Broncho-pneumo-
Do	Barbados	do	do	30	nia. Accidental drown-
Bocas del Toro,	Nicaragua	do	do	75	chronic myocardi-
R. P. Porto Bello, R. P.,	Panama	do	do	44	tis. Broncho-pneumo-
S. S. Quilque Interior of Panama.	Chile Mexico	White Black	do	20 40	nia. Lobar pneumonia. Pulmonary tuber- culosis.
U. S. S. Charleston.	United States.	White	do	45	Railroad trauma-
Interior of Panama. Bocas del Toro	Jamaica			55 29	Arteriosclerosis. Pulmonary tuber-
Interior of Panama.	do	do	Male	26	Chronic myocardi-
Mexico	China	Yellow	do	31	tis. Estivoautumnal
Interior of Panama.	Panama	Black	do	3 9	malaria. Pulmonary tuber- culosis.
Aguadulce, R. P Santa Maria, R. P	Colombia Panama			28 29	Do. Chronic nephritis.
					-

					E	mpl	oyee	s.				
		1	isch	arge	s.				Dea	ths.		_
Diseases.		Wh	ite.					Wh	ite.			
		eri- ns.		iro-	Bla	ck.		eri- ns.	Eu	ro-	Bla	.ck.
	м.	F.	М.	F.	М.	F.	М.	F.	М.	F.	М.	F.
General diseases.												
Typhoid fever. Malarial fever, estivo-au-					2	••••	••••			••••		
Malarial fever, tertian	1	••••			10	••••						
Malarial cachexia					2							
Diphtheria and croup			<u>.</u>		6							
Dysentery, entamebic Dysentery, unclassified Dengue	• • • • •				3		••••			••••		
Chicken pox. Purulent infection and septicemia. Pyemia	••••		••••		6			••••				
Septicemia					1						··i	
Tuberculosis of the lungs Acute miliary tuberculosis	• • • •				4						1	
Pott's disease		••••	••••		1.					••••		
Disseminated tuberculosis Rickets					1						1	
Syphilis, secondary Syphilis, tertiary Syphilis, hereditary					3 14		••••					
Gonococcus infection	2		···i		5							
Gonorrheal orchitis and epididymitis					1							
Soft chancre	3				3							
Cancer and other malignant tumors of the stomach and liver												
Cancer and other malignant tumors of the female geni-												
tal organs	••••										••••	
and of organs not specified Other tumors (tumors of the					••••							•••
female genital organs excepted)	14	i	5		68						3	
Other general diseases Alcoholism acute	3											

OF THE PANAMA CANAL FOR NOVEMBER, 1916.

		_	Noi	nemj	oloye	es.]	Non	resi	ider	ıts.				
	Dis	charg	ges.			D	eath	s.		Di	sch	arge	s.]	Dea	ths			
. W	hite				v	Vhite	э.											ns.	
Sol- d'rs.	Oth	ers.	Bla	ck.	Sol- d'rs	Oth	ers.	Bla	ck.	Wh	ite.	Bla	ek.	Wh	ite.	Bla	ek.	Total admissions.	Total deaths.
М.	м.	F.	м.	F.	м.	м.	F.	м.	F.	м.	F.	м.	F.	м.	F.	м.	F.	Total	Total
			1							1								4	
4 1 1	1	3	2 1 1	6 2 1 1 2						1 1 1	1							33 12 4	 i
1	1 2 2	1 2	1 1	$\frac{1}{2}$ $\frac{1}{1}$					1									1 9 5 14	
4			i	1														1 3 4 8	
	1		1 3	3 1				1 2 1	2 1	 1								2 1 4 12	1 3 4
			ĭ 	i				1 										2	1
1 5 1			1 1 4	4				1		1 1								1 2 1 10 24	2
23				1 1 2				1	1									1 1 33	1 1
3 1	1		1							 1								2 1 9 2	
						1													1
				1					1									1	1
				1				1										1	1
49 1 2	9	6	20 1	29		1		7	6	8	1							$\begin{vmatrix} 210 \\ 6 \\ 5 \end{vmatrix}$	17

				F	Empl	loyee	з.				
	1	Disch	arge	s.				Dea	ths.		
	W	ite.					Wh	nite.			
				Bla	ick.					Bla	ick.
M.	F.	М.	F.	М.	F.	М.	F.	M.	F.	м.	F.
								1			
1				1 1 1							
1							::::				
		2		3	1						
1				4						2	
2				3							
1											
1											
		1		9							
			-								
1				5							
	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Wr Americans. M. F.	White. Americans. Eucans.	White. Americans. Europeans. M. F. M. F. 1	Discharges.	Discharges.	Discharges.	White. Black. Americans. Europeans. M. F. M. F. M. F. M. F. M. F. 1 1 2 3 1 9	Discharges. Dea White. White. Americans. Europeans. Euro	Discharges. Deaths.	Discharges. Deaths.

OF THE PANAMA CANAL FOR NOVEMBER, 1916—Continued.

			No	nem	ploye	ees.						Nor	res	ideı	nts.				
	Dis	char	ges.			I	eath	15.		Di	isch	arge	s.		Dea	ths			
v	Vhit	е.			7	Vhit	е.											ns.	
Sol- d'rs.	Otl	iers.	Bla	ack.	Sol- d'rs	Oth	iers.	Bla	eck.	Wh	ite.	Bla	ick.	WŁ	ite.	Bla	ek.	Total admissions.	Total deaths.
м.	м.	F.	м.	F.	м.	м.	F.	м.	F.	м.	F.	М.	F.	м.	F.	М.	F.	Total	Potal
1 2														•••		•••		1 2	
												•••					• • •	1	•••
1			1		 1			1										1	1 1
2		1	1	3 2														6 5	
2				 1)						1 5	•••
···i				1							•••							2 3	• • •
4 3		1 1		1 1														12 5	• • •
		2	<u>i</u> .	1			1	i			•••							8	3
1 3							••••										• • •	1 8	
2		1																3	
											• • • •	• • •						1	
3	••••	••••		••••					• • • •	••••			••••					13	•••
3	1		••••	• • • •	••••				••••	••••	•••	•••	• • •	•••	•••		• • •	4	•••
 2 1	2 2 1	2 6	2 1 2	1														10 6 17 3	

					I	Empl	loyee	s.				
		I	Disch	arge	s.				Dea	ths.		
Diseases.		Wł	nite.					Wh	nite.			
		neri- ns.		ro- ins.	Bla	ack.		eri- ns.	Eu pea	ro- ns.	Bla	ick.
	м.	F.	м.	F.	м.	F.	М.	F.	м.	F.	М.	F.
Diseases of the respiratory system—Continued.												
Broncho-pneumonia Lobar pneumonia Pleurisy Asthma	3		 1		1						1	
Asthma Diseases of the digestive system.	1				1			••••	••••	••••		
Diseases of the mouth and annexa. Diseases of the teeth and gums. Stomatitis. Diseases of the pharynx. Follicular tonsillitis. Other diseases of the stomach (cancer excepted). Acute gastritis. Acute indigestion.	5 2		1 1		1 3 2 							
Diarrhea and enteritis (under two years) Colitis Diarrhea and enteritis (two years and over) Ankylostomiasis					1 1 4							
Tæniasis. Acute appendicitis Chronic appendicitis. Inguinal hernia. Other diseases of the intes-	1 2	1	1 1 2		6							
tines. Constipation Duodenal ulcer Simple peritonitis (non- puerperal)	1		1		1 1 1							
Nonvenereal discases of the genito-urinary system and annexa.												
Acute nephritis Bright's disease (chronic nephritis)				-	4						1	
Other diseases of the kid- ney and annexa. Movable kidney.	2 1]							

OF THE PANAMA CANAL FOR NOVEMBER, 1916-Continued.

			No	nem	ploye	es.						Nor	res	ider	ıts.				
	Dis	char	ges.			I	eath	ıs.		Di	sch	arge	s.		Dea	ths			
V	Vhite	э.			7	Vhit	e.											sus.	
Sol- d'rs.	Oth	ners.	Bla	ick.	Sol- d'rs	Oth	iers.	Bla	ick.	Wh	ite.	Bla	ek.	Wł	ite.	Bla	ick.	Total admissions.	Total deaths.
м.	м.	F.	м.	F.	м.	м.	F.	М.	F.	м.	F.	М.	F.	М.	F.	М.	F.	Total	Total
• • • • •		1	3	1		1								i				6 1 4 2	3
6	14	1 1 18 1	1	1 1				1										1 3 2 3 46 3 2 1	1
8 4 1	2	1 1 1 1	1	 1						1								1 4 2 13 11 10	
5 1 2	2		1								1							11 5 3	
2			2	4		1		2			•••	•••				•••		2 10	4
			-17-		ļ												<u> </u>	3	•••

					E	mpl	oyee	s.				
		D	isch	arges	3.				Dea	ths.		
Diseases.		Wh	ite.					Wh	ite.			
		eri-	Eu		Bla	ick.		eri- ns.	Eu pea		Bla	ck.
	м.	F.	м.	F.	м.	F.	м.	F.	м.	F.	М.	F.
Nonveneral diseases of the genito-urinary system and annexa—Continued.											. (
Pyelo-nephrosisCalculi of the urinary passages	₂											
Diseases of the bladder Cystitis Diseases of the urethra, uri-					2							
nary abscess, etc					2							
Nonvenereal diseases of the male genital organs Hydrocele	1				<u>i</u>							
Uterine tumor (noncancerous) Other diseases of the uterus.						····						
Metritis Cysts and other tumors of the ovary												
Salpingitis and other dis- eases of the female genital organs.												
Nonpuerperal diseases of the breast (cancer ex- cepted)												
The puerperal state.												
Accidents of pregnancy Abortion Other accidents of labor												
Puerperal septicemia Puerperal diseases of the breast.												
Diseases of the skin and of the cellular tissue.												
Furuncle	2		1		1							
Phlegmon and cellulitis. Dhobie itch Ulcer of skin Ingraving pail			1		6 4							
Ingrowing nail. Other diseases of the skin and annexa			2		1							

OF THE PANAMA CANAL FOR NOVEMBER, 1916—Continued.

			No	nem	ploye	es.						Non	res	ider	ıts.				
	Dis	char	ges.			D	eath	s.		Di	sch	arge	s.	-	Dea	ths			
77	Vhite				7	Vhit	e.											ns.	
Sol- d'rs.	Oth	ers.	Bla	ick.	Sol- d'rs	Oth	ers.	Bla	ck.	Wh	ite.	Bla	ek.	Wł	ite.	Bla	ek.	Total admissions.	Motol dootho
м.	М.	F.	м.	F.	м.	М.	F.	м.	F.	м.	F.	м.	F.	м.	F.	М.	F.	Total	(noto)
2		2	1				1											5	
	 1	 4																2 2 7	
			1															3	
3			1															5	-
		1		5														6	-
 . .		1 5 1		9														15 1	
		2														,		2	-
• • • •		2		2														1	-
• • • •				1														1	-
		9 1 4 2 1		10 5 2			1											19 1 9 4 1	
				1									•••					1	-
3 2 2.	2 1	1	1	1						1								2 9 12 3 6 7	
2	1	1		1							•••	• • •	•			1		8	1

	Employees.												
		I	Disch	arge	3.		Deaths.						
Diseases.		Wł	nite.					Wł	ite.				
		neri- ns.		iro-	Bla	ack.	Ameri- cans.		Euro- peans.		Bla	ick.	
	M.	F.	М.	F.	м.	F.	м.	F.	М.	F.	м.	F.	
Diseases of the bones and of the organs of locomotion.													
Diseases of the bones (tu- berculosis excepted) Diseases of the joints (tu- berculosis and rheuma-	2		1					••••					
tism excepted)				• • • • •	1 1 5			• • • •		• • • •			
Arthritis					5								
Synovitis. Amputations	1			• • • • • • • • • • • • • • • • • • • •	1	1							
Other diseases of the organs of locomotion	2	1	1		1								
Malformations.													
Congenital malformations (stillbirth not included)	1												
Diseases of early infancy.													
Newborn child. Including premature birth. Including malnutrition													
Old age.													
Senility					:								
Affections produced by external causes.													
Poisoning by foodOther acute poisonings Burns (conflagration ex-	5				2 1								
cepted)	ï		1		1								
piercing instruments	1				12								
Traumatism by fall Traumatism in mines and	••••	••••	1		10		• • • •	••••	••••	••••	••••	••••	
quarries Traumatism by machines Traumatism by other crush-	···i				1 6			••••					
landslides, etc.)	3		1		5								
Railroad traumatism Injured by animals			• • • •		1		••••	••••	••••	• • • •	• • • •		

OF THE PANAMA CANAL FOR NOVEMBER, 1916—Continued.

	Nonemployees. Nonresidents.																		
	Dis	char	ges.			Ι	eath	ıs.		Di	sch	arge	9.		Dea	ths			
V	Vhit	e.`			7	Vhit	е.											ons.	
Sol- d'rs.	Oth	ners.	Bla	Black.		Sol-d'rs Others.		Black.		White.		Black.		White.		Black.		admissi	Total deaths.
м.	м.	F.	м.	F.	М.	м.	F.	м.	F.	м.	F.	м.	F.	м.	F.	м.	F.	Total	Total
4	1	2					 						• • • •			•••	•••	10	
2	1	1	1							1							•••	2 1 5 5 1 16	•••
• • • •	7			1				••••	••••		• • • •	•••	•••			• • • •	•	9	
	5	2 	5 1	5								•	• • •			• • •	•••	17 1 1	i
• • • •			1			.i			:			•	•••	•••	•••			1	•••
		. 1											• • •		•••		•	8	
4				 1							•••		•••	:	• • •		• • •	3 6	
2 1			1					<u>.</u>					•••					18 13	··i
										<u>.</u>								1 8	
1 2	1				1							• • • •						10 2 2	i

·					E	mpl	oyee	8.				
		Ι	Disch	arge	3.	Deaths.						
Diseases.		W	ite.					Wh	ite.			
		eri- ns.		ro- ns.	Black.		Am	eri- ns.	Eu		Bla	ick.
	М.	F.	М.	F.	м.	F.	М.	F.	М.	F.	М.	F.
Affections produced by external causes—Contd.												
Electricity (lightning excepted)	1							••••		••••		
fied)	1 3		4		4 3 31							
Ill-defined diseases.		-										
Infections of undetermined origin					2 1							
Grand total	78	3	29		234	3					7	

OF THE PANAMA CANAL FOR NOVEMBER, 1916—Continued.

	Nonemployees.											Nor	res	ider	ıts.					
	Dis	char	ges.			Deaths.					Discharges.					Deaths.				
T	Vhit	е.				Whit	te.											ns.		
Sol- d'rs.	Otl	iers.	Bla	ek.	Sol- d'rs	Oth	ners.	Bla	ack.	Wh:	ite.	Bla	ck.	Wb	ite.	Bla	ek.	Total admissions.	Total deaths.	
м.	м.	F.	м.	F.	м.	м.	F.	м.	F.	м.	F.	м.	F.	м.	F.	м.	F.	Total	Totai	
3	2		1	1							• • • •	• • • •	•••		•••	•••	•••	1 11		
2	1		2							i					•••		···	1 4 43		
2	1	8	2	2 3						6			· · ·					6 22		
171	63	97	59	99	2	3	3	15	7	22	3		1	1				862	38	

TABLE VIII .- CONSOLIDATED

[A=White Americans; F=

		mair Vov.		Ad	mitt	ed.	Died.		
	A.	F.	В.	Α.	F.	В.	Α.	F.	В.
ANCON HOSPITAL.									
Panama Canal employees	22 7 112 8	11 3 19 1	105 45 53 35	59 6 247 13	18 4 33 5	151 44 114 37	2	···· 2	3 3 8 8
Total	149	34	238	325	60	346	2	2	22
Corozal Hospital (insane).									
Panama Canal employees. Panama R. R. employees. Panama pay patients. Other pay patients. Charity patients.	2 5 3	32 4 9	6 2 188 3 60	4	4	8		i	4
Total	10	45	259	4	5	12		1	5
Grand Total	159	79	497	329	65	358	2	3	27
Corozal farm.									
Panama Canal employees		10	52			6			
Chronic ward.									
Charity patients			17			10			
COLON HOSPITAL.									
Panama Canal employees. Panama R. R. employees. Panama pay patients. Other pay patients Charity patients.	7	3 1 4	12 9 1	12 9 17 5	2 7 1 21	27 37 8 5 4		1 3	1 1
Total	16	8	22	43	31	81		4	2
PALO SECO LEPER ASYLUM. Panama pay patients Charity patients		2 2	38 24			1			1
Total		4	62			1			1
GRAND TOTALS.						-	-	_	
Panama Canal employees. Panama R. R. employees. Panama pay patients. Other pay patients. Charity patients.		24 3 35 27 12	175 56 226 57 136	71 15 268 18	20 11 5 54 6	184 81 17 119 55	2	2 5	3 4 6 8 9
Total	175	101	650	372	96	456	2	7	30

HOSPITAL REPORT. White foreign; B=Blacks.]

Dis	scharg	ged.	Tra	nsfer	red.		mair ov. 3		Average number constantly sick.							
A.	F.	В.	Α.	F.	В.	A.	F.	В.	American.	Foreign.	Black.	Total.				
56 6 269 13	19 4 27 3	140 42 93 28	4	 1	1 1 10	25 7 84 8	10 3 23 2	113 43 65 26	24. 33 6. 20 103. 80 7. 37	13. 13 2. 97 23. 17 1. 16	112. 87 38. 53 58. 03 31. 24	150. 23 47. 70 185. 00 39. 77				
344	53	303	4	1	12	124	38	247	141.70	40.43	240.67	422.80				
4	1	1 4 1				2 5 3	34 4 10	6 1 188 2 63	2.00 2.97 3.00	33.53 4.00 9.97	6.00 1.17 188.10 2.76 61.53	6.00 1.17 223.63 9.73 74.50				
4	1	6				10	48	260	7.97	47.50	259.56	315.03				
348	54	309	4	1	12	134	86	507	149.67	87.93	500. 23	737.83				
		3					10	55		10.00	52.87	62.87				
		1			2			24			21.77	21.77				
11 8 15 3	2 4 1 15	24 24 2 4 1	2 2	1	8 9 5 2 2	3 6 7 2	2 3 6	7 12 	2. 36 4. 03 5. 30	2.73 1.36 .60 5.36 .80	9. 21 8. 71 . 20 1. 50 . 43	14.30 14.10 .80 12.16 1.23				
37	22	55	4	2	26	18	11	20	11.69	10.85	20.05	42.59				
							2 2 4	38 24 62		2.00 2.00 4.00	40. 56 24. 00 64. 56	42. 56 26. 00 68. 56				
67 14 288 16 385	21 8 2 42 3 76	167 67 6 98 30	2 6 8	1 1 1 3	8 10 5 3 14 40	28 13 2 96 13	22 6 36 33 14 —————————————————————————————————	181 56 226 67 138 668	26. 69 10. 23 2. 00 112. 07 10. 37	25. 86 4. 33 36. 13 32. 53 13. 93	180. 95 48. 41 228. 86 62. 29 138. 97	233.50 62.97 266.99 206.89 163.27				

Table IX.—CONSOLIDATED DISPENSARY REPORT. EMPLOYEES TREATED IN QUARTERS.

Station.	Re- main- ing Nov. 1.		Ad- mitted.		Died.		Dis- charged.		Transferred.		Re- main- ing Nov. 30		Days lost.		
	w.	в.	w.	В.	w.	В.	w.	в.	w.	В.	w.	В.	w.	В.	Total.
Ancon Balboa Pedro Mi-	5 5		126 136	1 8			129 133	1 6	1 4	1	1 4	 1	197 286	2 25	199 311
guel Paraiso Gamboa			19 15	1 3 2			17 14	 3 2	1		1	1	24 30 2	3 4 7	27 34 9
Gatun Colon	1 6	15	11 82	3 169			9 84	2 164			3 4	20	32 175	605	36 780
Total.	17	15	389	187			386	178	7	2	13	22	746	650	1, 396

ALL CASES TREATED BUT NOT EXCUSED.

Station.	Е	mploye	es.	Nor	nemploy	rees.	Totals.				
	w.	в.	Total.	w.	В.	Total.	w.	В.	Total.		
Ancon. Balboa. Pedro Miguel. Paraiso. Gamboa Gatun. Colon.	2,759 3,173 978 885 45 241 1,357	4, 167 3, 721 1, 331 2, 567 203 1, 197 3, 444	6,926 6,894 2,309 3,452 248 1,438 4,801	1,981 2,092 781 811 16 670 1,037	3,001 572 430 748 332 1,057 1,151	4,982 2,664 1,211 1,559 348 1,727 2,188	4,740 5,265 1,759 1,696 61 911 2,394	7, 168 4, 293 1, 761 3, 315 535 2, 254 4, 595	11,909 9,558 3,520 5,011 596 3,165 6,989		
Total	9, 438	16,630	26,068	7,388	7, 291	14, 679	16,826	23, 921	40, 747		

 FABLE IX.—CONSOLIDATED DISPENSARY REPORT.—Continued.

 CONSOLIDATED ADMISSION REPORT.

	White.	Black.	Total.
Total admissions to hospitals, excluding Corozal			
farm and chronic ward. Total admissions of employees to quarters	468 389	440 187	908 576
Total	857	627	1,484
tals and from quarters to hospitals, whose admissions are duplicated in above figures.	18	40	58
Net admissions to hospitals and quarters	839	587	1,426
EMPLOYEES.			
Employees admitted to hospitals	117 389	259 187	376 576
Total	506	446	952
from quarters to hospitals, whose admissions are duplicated in above figures.	10	20	30
Net admissions of employees to hospitals and quarters	496	426	922
Annual average per thousand of admissions of employees to hospitals and quarters	1, 265. 79	168. 55	315. 83

Contagious and Infectious Diseases Reported During the Month of November, 1916.

Disease.	Panama.	Colon.	Canal Zone.	Total.
Beriberi	5	4	1	3 10
Diarrhea Diphtheria Dysentery Cerebrospinal meningitis.	4 2	2	2 4	10 2 1
Malarial fever	9 1	10 1	26 12	58 22 1
Pneumonia Scarlet fever Smallpox	1 3	1		1 1 3
Syphilis Tetanus Tuberculosis. Meningitis, tubercular	2 28	5	7	40 2
Typhold fever Whooping cough Yaws	3	3 1	1	3 6 1

TABLE X.—NUMBER OF EMPLOYEES CONSTANTLY SICK IN HOSPITALS AND QUARTERS.

	White.	Colored.	Total.
Hospitals: Ancon Hospital Colon Hospital	46. 63 10. 48	158.57 17.92	205. 20
Total	57.11	176.49	233, 60
Quarters: Ancon Balboa. Pedro Miguel Paraiso Gamboa Gatun Colon. Total	6.57 9.53 .80 1.00 .07 1.07 5.83	.07 .83 .10 .13 .23 .13 20.17	6. 64 10. 36 . 90 1. 13 . 30 1. 20 26. 00
	Hospi- tals.	Quarters.	Total.
Average number of employees constantly sick: White Colored Total	57.11 176.49 233.60	24. 87 21. 66 46. 53	81. 98 198. 15
Average number of employees constantly sick per 1,000: White Colored	12.14 5.82	5.29	17. 43 6. 53
Total	6.67	1.33	8.00

TABLE XI.—AVERAGE LENGTH OF STAY IN HOSPITALS OR QUARTERS FOR EACH ADMISSION OF SICK EMPLOYEE.

_	White.	Black.	Total.
Hospitals: Ancon Hospital Colon Hospital Quarters: Ancon Balboa Pedro Miguel Paraiso Gamboa Gatun	7.14 2.07 2.00 1.33 2.00	24.21 10.15 2.00 3.28 1.33 3.50 1.33	19. 98 9. 25 2. 06 2. 05 1. 33 1. 89 3. 50 3. 08
Colon	2.13	5.80	4.50

TABLE XII.—FINANCIAL STATEMENT, DEPARTMENT OF HEALTH.

	Oct., 1916.	Sept., 1916.	Oct., 1915.
Administration: Chief health office	\$407.18	\$817.23	\$959. 22
Ancon Hospital	27, 815. 06	26, 129. 16	24, 427. 20
Board of health laboratory	2,002.90	2, 217, 44	1 587 44
Corozal Hospital and farm	7, 422. 24 209. 80	6, 475. 28 215. 26	6,876.07 215.18
Chronic ward Colon Hospital	4, 569. 75	4, 496. 17	3,304.12
Palo Seco Leper Asylum	1, 482. 59	1,979.55	1,828.96
Santo Tomas Hospital	1,047.00	888. 75	1,023.75
Medical storehouse Reserve for new tools.	637.33 2,159.04	674. 21 2, 095. 77	832. 79
Total	47, 345. 71	45, 171. 59	40, 095. 51
District dentists.	27.08	28.39	56, 49
Dispensaries:			
Balboa	1,146.10	1, 206. 82	989. 14 528. 77
Corozal Pedro Miguel	420.12	423.94	499.64
Paraiso	547. 75	552. 51	619.63
GamboaGatun	137. 63 509. 28	151.53 674.50	157. 44 755. 40
Total	2,787.96	3,037.69	3,606.51
Sanitary division: General inspector	50.00	50.00	50.00
Health office, Panama	3, 599, 92	3, 072, 29	4,003.29
Street cleaning, Panama	3,599.92 3,911.03	3,072.29 4,257.84	4, 592, 46
Street cleaning, Panama Health office, Colon Street cleaning, Colon	2,477.25	2,999.06	3, 412. 47
		2, 139, 22	2,231.78
Total	12, 164. 22	12, 518. 41	14, 290. 00
Zone sanitation:			
Ancon	1,621.77	1,960.29	1,639.57
Balboa	723.33 1,213.43	1,366.01 1,309.32	1,529.91 1,604.83
Corozal Pedro Miguel	2,994.36	3, 939. 33	3, 119. 47
Culebra			1.11
Frijoles	72. 27 2, 950. 03	75. 75 3, 933. 83	102.98 3,070.17
Gatun Cristobal-Mount Hope	1,904.65	2, 107. 26	2,587.62
Total	23, 644. 06	26,910.20	27, 945. 66
Quarantine division:			
Chief quarantine office	169.08	171.39	169.34
Balboa-Panama	1,977.76	2,041.75	1,892.06
Colon-Cristobal Inspection of cattle	2,810.30 497.50	3,411.81	3,350.52
Total.	5, 454. 64	5,624.95	5, 411. 92
10001	0, 101.01	0,121.00	0, 111.02
RECAPITULATION.			
Chief health office	407.18	817.23	959. 22
Hospital division	47, 345. 71	45, 171. 59	40,095.51
Dispensaries Sanitary division	2, 787. 96 23, 644. 06	3,037.69 26,910.20	3,606.51 27,945.66
Quarantine division	5, 454. 64	5, 624. 95	5, 411. 92
Total	79, 639. 55	81,561.66	78,018.82
	1		1

TABLE XIII.—ANCON HOSPITAL. REPORT OF NATIONALITY OF PATIENTS TREATED.

	Total American.		rican.	Other nations.	
	ber treat- ed.	White.	Black.	White.	Black.
Hospital:					
Panama Canal employees Panama Railroad employees Panama Government pay patients.	366 109	81 13	1	29 7	255 89
Other pay cases	578 99	359 21		52 6	167 72
Total	1,152	474	1	94	583
Asylum: Panama Canal employees. Panama Railroad employees. Panama Government pay patients. Other pay patients. Charity patients.	6 2 234 16 77	2 9 3		36 4 10	6 2 196 3 64
Total	- 335	14		50	271
Grand total	1,487	488	1	144	854
Soldiers . Chronics . Farm (cripples) .	242 27 68	242		10	27 58

REPORT OF DAYS LOST IN HOSPITAL.

Hospital: Panama Canal employees Panama Railroad employees	4,510 1,431	730 186	19	394 89	3,367 1,156
Panama Government pay patients. Other pay patients. Charity patients.	5,550 1,193	3, 114 221		695 35	1,741 937
Total	12,684	4, 251	19	1, 213	7, 201
Asylum: Panama Canal employees Panama Railroad employees Panama Government pay patients Other pay patients Charity patients.	180 35 6, 709 292 2, 235	60 89 90		1,006 120 299	180 35 5,643 83 1,846
Total	9, 451	239		1,425	7,787
Grand total	22, 135	4,490	19	2,638	14,988
Soldiers	2,310 653 1,886	2,310		300	653 1,586

Average cost per subsistence per day, \$0.2709.

TABLE XIII .- ANCON HOSPITAL-Continued.

WARD LABORATORY REPORT.

Blood examinations (total number)	546-
Estivo-autumnal	26
Tertian	14
Differential counts	4
Hemoglobin estimations	155
Leucocyte counts	32
Red blood counts	8
Stool examinations (total number)	508
Ameba	1
Ascaris lumbricoides	5
Ciliated nomads	6
Entameba (hystolitica and tetragena)	1
Guaiac tests	22
Pus and blood.	25
Strongloides	16
Tenia saginata dispar (ova)	2
Tricocephalus dispar	9
Uncinaria (ova)	30
Urine examinations (total number)	1,886
Albumen	427
Bile	12
Casts	424
Ciliated nomads	11
Epithelia	949
Guaiac tests	94
Hemin crystals.	6
Indican	111
Pus	681
Pus and blood	288
Sugar (pos. 5, neg. 35)	40
Sputum examinations	346
Positive for tubercle bacilli	33
Smear examinations (total number)	24
Urethral	12
Vaginal	21
Spinal fluid	4
Throat smears	1
Urine smears	6

REPORT OF SURGICAL OPERATIONS.

	Number.	Died.
Amputations:		
Leg. Leg, double	1 2	
Operations on bones:		
Osticetomy. Wiring of fractures, simple.	2 2	
Adenectomy: Cervical		
Axillary	1	
Inguinal, single	2	
Femoral Herniotomy:	1	
Inguinal, single	7	
Inguinal, double		
Nephrotomy Nephrectomy		
Nephropoxy	1	
Urethrotomy, internal. Urethrotomy, external.	1 4	
Varicocele, radical cure	2	

TABLE XIII.—ANCON HOSPITAL—Continued. REPORT OF SURGICAL OPERATIONS—Continued.

,		
	Number.	Died.
Genito-urinary tract—Continued. Hydrocele, single, radical cure	2	
Epididymotomy	13	
Curetage uteri Perineoplasty	1	
Tracholorrhaphy	1	
Hemorrhoids, radical cure.	7	
Fistula in anó, excision of	3	
Excision of surface neoplasms	2	
Plastic operation for congenital defect. Plastic operation for effects of disease	1	
Laparaotomy:	_	•
Exploratory. Gastrectomy, partial.	1	
Gastro-enterostomy	1	
EnteroctomyAppendectomy	21	
Appendectomy with local peritonitis	1	
Splenectomy Supravaginal hysterectomy	1 4	
Hysteromyomectomy	4	
Salpingo-oophorectomy. Ovarian eystectomy.	3	
Oophorectomy	2	
Suspensio-uteri Mayo bilateral bunion	3	
Minor operations, various other	165	
Total	304	1
		1

REPORT OF OPERATIONS, EYE AND EAR CLINIC.

Tonsillectomy and adenoidectomy	28
Tonsillectomy only	7
Adenoidectomy only	9
Submucous resections	9
Turbinectomy	5
Mastoidectomy, simple	1
Pterygium transplantations	4
Evisceration	1
Minor nose	1
Minor eye	1
Total	66
Refractions	111

REPORT OF OUT-PATIENT DEPARTMENT.

Clinic,	Total visits.	New çases.	Pay cases.	Prescrip- tions.
Medical Surgical Eye and ear	302 276 522	191 141 132	22 7	279 59 26
Total	1,100	464	29	364

TABLE XIII.-ANCON HOSPITAL-Continued.

MONTHLY REPORT OF VACCINATIONS.

Number of adults vaccinated	522
Number of takes. Number of school children vaccinated	34
Number of school children vaccinated	30
Number of takes	6
BOARD OF HEALTH LABORATORY.	
Bacteriological examinations of:	
Blood cultures (3 positive for B. typhosus)	20
Throat cultures (9 positive for B. diphthériae; new 6, for release 3)	97
Urines	155
Stools	142
Sputum Pathological fluids, exudates, etc	6
Pathological fluids, exudates, etc	8
Smears, gonococcus	8 2 1 2
Culturé of autopsies. Leper suspects.	1
Leper suspects.	
Daîry milk from Corozal.	29
Wassermann reactions	750
Autogenous vaccines prepared	4
Antityphoid vaccinations	1
Smallpox vaccinations. Smallpox allergin test (positive).	26
Smallpox allergin test (positive)	1
Animal inoculations. Examination of blood preliminary to a transfusion; number of individuals	9
Examination of blood preliminary to a transfusion; number of individuals	6
Dark field examinations.	13
Dark field examinations. Vaccine points manufactured.	2,355
('hamieal avaminatione of:	1
Mothers' milk	1
Urine	10
Fat determinations of milk from Corozal farm	4
Powder for poison	1
Powder for poison Stomach contents Stomach contents for opium.	4
Stomach contents for opium	1
Economy brand skim milk	1
Spinal fluids—	
Butyric acid test. Ammonium sulphate test.	10
Ammonium sulphate test.	10
Phenol test	10
Colloidal gold test	3
Colloidal gold test. Pathological tissues prepared; paraffin 353; frozen 9.	362
Surgical tissues reported. Test meals, pathological examination.	51
Test meals, pathological examination.	3
Placental smears	23
Autopsies performed	26
Animals autopsied (hogs 10; rats (complete) 10; calves 9; monkeys 1)	30
Drowned bodies examined	2
Sick calf under observation. Rats examined (mus musculus, 535; mus norwegious, 757; mus alexandrinus,	1
Rats examined (mus musculus, 535; mus norwegious, 757; mus alexandrinus,	
5; mus rattus, 164)	1,461
Bodies embalmed	3
Interments at Corozal	10
Taken to Panama	6
Taken to Gatun	1
Taken to Mount Hope	1
Cremations	19

TABLE XIII,—ANCON HOSPITAL—Continued. MOSQUITOES IDENTIFIED AT THE BOARD OF HEALTH LABORATORY.

Stations Stations									
Balboa 2 554 7 Corozal district 33 1 1 4 36 Corozal post 61 1 1 15 11	Stations.	Anopheles, albimanus.	Anopheles, tarsimaculata.	Anoph. pseudopunctipennis.	Anopheles, apicimacula.			Mansonia titillans.	Mansonia fasciolatus.
Total	Balboa Corozal district Corozal post Pedro Miguel Pedro Miguel Pedro Miguel Pedro Miguel railroad station. Paraiso Red Tank Miraflores Rio Grande Lirio & Cerro Dredges, Culebra Cut. Gamboa Gatun. New Gatun Frijoles. Monte Lirio Barracks, Cristobal. Silver married quarters Mount Hope village Panama Railroad cars, Cristobal. Colon Hospital Lincoln House, Colon Camp Gaillard Empire. Camp Otis. Fort Randolph Fort Sherman.	2 33 61 8 17 8 3 3 108 16 61 18 18 2 2 2 8 23	6		1		3,107 1,230 134 4457 1,230 134 1234 457 134 138	36 11 1265 1,206 1993 22 24 4 534 664 467 2,642 458 340 6,438 1,054 45 7 2,436 612 4,320	11 1 2
	Total	1,095	49	3	3	12	8,174	23,091	31

TABLE XIII.-ANCON HOSPITAL-Continued.

MOSQUITOES IDENTIFIED AT THE BOARD OF HEALTH LABORATORY-Continued.

Stations.	Mansonia nigricans.	Stegomyia.	Aedes taenioryhnchus.	Wyeomyia.	Lesticocampa.	Joblotia digitatus.	Lutzia allostigma.	Psorophora posticatum.	Total.
Ancon Balboa. Corozal district. Corozal post. Pedro Miguel. Pedro Miguel. Pedro Miguel raliroad station. Paraiso. Red Tank. Miraflores. Rio Grande. Lirio & Cerro. Dredges, Culebra cut. Gamboa. Gatun. New Gatun. Frijoles. Monte Lirio. Barracks, Cristobal. Silver married quarters. Mount Hope village Panama Railroad cars, Cristobal. Colon Hospital. Lincoln House, Colon Camp Gaillard Empire. Camp Otis Fort Randolph. Fort Sherman. Fort Grant.	3 1 5		238	2 1 3 1 1 1 1 5 1 6 1 2 1 2 1 2 1 2 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1	1 222 4	i	1	1 2	501 565 75 92 280 1,230 237 255 536 666 923 2,654 461 7,090 1,168 3,178 1,232 1,722 1,026 466 2,673 627 4,328 17 1,297
Total	10	41	240	116	-27	1	1	4	32,898

${\bf TABLE~XIII.-ANCON~HOSPITAL-Continued.}$

COROZAL HOSPITAL.

STATEMENT OF COMMITMENTS, DISCHARGES, AND DEATHS, NOVEMBER, 1916. COMMITMENTS.

	Male.	Female.
From Canal Zone: First admission	6	3
Third admission	1	
Total	12	9

DISCHARGES.

	Well.		Imp	roved.	Unimproved.		
	Male.	Female.	Male.	Female.	Male.	Female.	
Barbados. Jamaica Panama United States		1	1	1 1 2	/D) 2		
United States Total		2	(D) 1 2	4	(D) 3		

NOTE: (D) Four soldiers deported to United States.

DEATHS.

Medical diagnosis.	Mental diagnosis.	Male.	Female.
Broncho - pneumonia; syphilis; chronic nephritis.	Psychosis associated with cerebral syphilis.		_
Pellagra	Dementia precox Epilepsydo		1
nariasis; epilepsy. Pellagra; broncho-pneumonia	with cerebral arterio-	. 1	
Syphilis, tertiary; stricture of ure- thra; gangrene of lungs.	sclerosis. Psychosis, associated with cerebral syphilis.	1	
Abscess of brain	Dementia precox	11	

¹ Died at Ancon Hospital.

TABLE XIV.—COLON HOSPITAL.

NATIONALITY.

	White American.	White Foreign.	Black.	Total.
Panama Canal employees	16	5 7	39	60
Panama R. R. employees			46	67
Panama pay Other pay	24	25	8 6	10 55
Charity cases		20	4	9
·				
Total	59	39	103	201
Laboratory	REPORT.			
Blood examinations				119
Estivo-autumnal				7
Tertian.				1
White blood counts				
Differential counts				2
Stool examinations				43
Uncinaria				5
Tricocephalus dispar				2
Red blood cells				
Pus				
Urine examinations				
Casts				
Pus				
Blood				29
Sputum examinations. Positive for tubercle bacilli				61
Positive for tubercle bacilli				5
Smear examinations. Positive for gonorrhea.				3
rositive for gonormea	• • • • • • • • • • • • • • • • • • • •		•••••	2
Surgical Op	ERATIONS.			
Herniotomy:				
Inguinal, single				
Inguinal, double	• • • • • • • • • • • • • • • • • • • •			1
Genito-urinary tract: Varicocele, radical cure				1
Epididymotomy		• • • • • • • • • • • • • • • • • • • •		î
Curettage uteri				
Trachelorrhaphy				
Obstetrical:				_
Low forceps				1
Version. Perineorrhaphy			• • • • • • • • • • • • • • • • • • • •	1
Thorax: Stab wound of cheet operation for			• • • • • • • • • • • • • • • • • • • •	î
Perineorrhaphy. Thorax: Stab wound of chest, operation for Rectum: Hemorrhoids, radical cure	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,			î
General: Tenorrhaphy				3
Laparotomy:				
Gastroenterostomy (one for perforative	ve duodenal	ulcer, after	r closure	of
ulcer and drainage)				2
Appendectomy				4
Myomectomy. Ovarian cystectomy, bilateral				i i
Suspensio uteri			*******	4
Minor operations, various.				9
Minor operations, various Minor operations, various (dispensary)			145
	,			

TABLE XV.—PALO SECO LEPER ASYLUM. NATIONALITY OF PATIENTS.

	Number	treated.	Amer	icans.	Others.	
Class.	White.	Black.	White.	Black.	White.	Black.
Employees. Panama pay patients. Charity patients.	2 2	41 26			$\frac{2}{2}$	41 26
Total	4	67			4	67

Cost of subsistence per patient per day, \$0.28.

TABLE XVI.—SANTO TOMAS HOSPITAL.

	Remaining Nov.	Admit- ted.	Dis- charged.	Died.	Remaining Nov.
Pay cases	18 421	80 852	67 749	3 94	28 430
Total	439	932	816	97	458

Average number of patients constantly sick	450
Total number of days treatment.	13,340
Average number of days treatment for each patient	
Cost of subsistence per patient per day	\$0.39

NATIONALITY OF PATIENTS.

Class.	Number	Ame	rican.	Other nations.		
Class.	treated.	White. Black		Black. White.		
Pay cases	98 1,273	1 9		36 114	61 1,150	
Total	1,371	10		150	1,211	

DISPENSARY REPORT.

Class.	White.	Black.	Total.
NativesForeigners	20 33	615 342	635 375
Total	53	957	1,010

TABLE XVI.—SANTO TOMAS HOSPITAL—Continued.

DISEASES TREATED.

313131 I3.	3,
Smallpox	1
Measles	1
Scarlet fever	1
Diphtheria and croup	12 12 1 2 4 8 2 12 12
Influenza	Ō
Dysentery	1^{2}
Léprosy	1
Frysinelas	2
Other enidemia discosses	4
Erysipelas. Other epidemic diseases. Purulent infection and septicemia.	g.
Purificult injection and septicemia	9
Pellagra Tuberculosis of the lungs	. 0
Tuberculosis of the lungs.	12
Pott's disease	2
Syphilis	40 23 32
Soft chancre	23
Gonococcus infection Cancer and other malignant tumors of the breast	32
Cancer and other malignant tumors of the breast	1
Other tumors.	4
A out of a look of any	5 4 3 2 6 8 9
Acute alcoholism Other forms of mental alienations.	4
Other forms of mental alienations.	4
Epilepsy Hysteria	3
Hysteria	2
Neuralgia and neuritis.	6
Other diseases of the eyes and their annexa.	8
Organic diseases of the heart.	9
Diseases of the arteries.	
	4 3 9
Diseases of the veins	0
Diseases of the lymphatic system	9
Chronic bronchitis.	21
Broncho-pneumonia	2
Pneumonia	5
Pleurisy	21 2 5 4 2
Asthma	2
Diseases of the pharynx	19
Other diseases of the stomach.	14
Other diseases of the stomach.	î
Diarrhea and enteritis (under 2 years). Diarrhea and enteritis (over 2 years).	
Diarrhea and enteritis (over 2 years)	6
Ankylostomiasis	45
Intestinal parasites	9
Intestinal parasites Appendicitis and typhlitis.	11
Hernias intestinal obstructions	12
Hernias, intestinal obstructions. Diseases of the anus and fecal fistula.	4
Other diseases of the intestines.	10
Biliary calculi	2 2
Other diseases of the liver	2
Diseases of the spleen	1
Simple peritonitis.	2
Simple peritonitis Bright's disease (chronic nephritis) Diseases of the bladder	34
Diseases of the bladder	2
Diseases of the urethra	3
Diseases of the urethra Nonvenereal diseases of the female genital organs.	34 2 3 8 2
Uterine hemorrhage.	9
	1
Uterine tumor	1
Metritis.	14
Other diseases of the uterus	9
Other diseases of the uterus. Salpingitis and other diseases of the female genital organs.	11
Nonpuerperal diseases of the breast	1
Normal labor.	100
Accidents of pregnancy.	18
Other aggidants of labor	2
Other accidents of labor. Puerperal diseases of the breast.	ī
A custo abrancas of the preast.	10
Acute abscess Other diseases of the skin and annexa	
Other diseases of the skin and annexa	31
Diseases of the bones	1
Diseases of the joints.	10

TABLE XVI.—SANTO TOMAS HOSPITAL—Continued.

DISEASES TREATED-Continued.

Nurslings discharged from hospital without disease	95
Venomous bites and stings	1
Other acute poisonings	3 2
Burns.	2
Traumatism by firearms	
Traumatism by cutting or piercing instruments	7
Traumatism by other crushings.	3 3
Sprains.	
Fractures	12
Other external violence.	15
No disease	6
Total discharges	816
Deaths	97
Remaining	458
Total number of patients treated during the month	1,371

SURGICAL OPERATIONS.

	Number.	Deaths.
Digits, multiple	4 2	
Adenectomy, cervical		• • • • • • • • • •
Adenectomy, inguinal, single	1	
Adenectomy, inguinal, single Adenectomy, inguinal, double. Herniotomy, inguinal, single.	5	
Termiotomy, inguinal, single	9	• • • • • • • • • • • • • • • • • • • •
Herniotomy, ventral	. 4	
dermotomy, strangulated	1	
Trathreten arternal	1 7	
ystotomy Jrethrotomy, external Hydrocele, single, radical cure Lydrocele, double, radical cure	2	
Tydrocele, Single, radical cure	0	
Tymotogo utori	1 7	
Curetage uteri Phoracotomy Hemorrhoids, radical cure	1	
Jamarrhaide radical cura	1 2	1
Temorrhoids, radical cure Fistula in anus, excision of Sxeision of surface neoplasm Plastic operation for effects of disease kin graft Laparotomy for intestinal obstructions Appendectomy Appendectomy with local peritonitis Pan-hysterectomy Sunrayagial hystorectomy	5	
Excision of surface neonlasm	1	
Plastic aparation for affacts of disassa	10	
Ilan graft	iii	
Langrotomy for intestinal obstructions	1	
Apparotomy for micestimal obstitutions	10	
Annandactomy with local paritopitis	ĭ	
Pan-hysterectomy	2	
Supravaginal hysterectomy	2	
Salningectomy single		
Salpingectomy, single	2	
Salpingo-oophorectomy	11	
Dophorectomy		
Suspensio-uteri	8	
Major operations, various other	i	
Major operations, various other	22	
Tarior opolarions, various outer		
Total	128	1
	1	

TABLE XVII.—SUMMARY OF SANITARY WORK PERFORMED AND MATERIAL EXPENDED DURING THE MONTH OF NOVEMBER IN THE CANAL ZONE.

Work requests on supply department:	
Grass cutting	. 40
Screening	. 11
Miscellaneous. Work requests on municipal engineering department.	. 8
Work requests on municipal engineering department	. 13
Buildings inspected:	
For screening	1 699
For magnitoes	1,622 5,237 2,235
For mosquitoes. For general sanitation	0,201
For general sanitation	. 2,233
Stores, inspections of	. 24
Restaurants, inspections of	. 12
Shops, inspections of Notices served to abate nuisances.	. 76
Notices served to abate nuisances	. 2
Houses disinfected and fumigated	4
Pit closets inspected	582
Closets disinfected	665
Closets disinfected Garbage cans emptied	2,852
Dat bage cans emplied	2,002
Rat traps in use	400
Rats destroyed. Number of mosquitoes destroyed in dwellings:	. 489
Number of mosquitoes destroyed in dwellings:	
Anopheles	. 919
Stegomyia	. 40
Stegomyia Culex	. 1,696
Mansonia.	12, 498
Material expended:	,
Lawaida calleng	544
Larvacide, gallons Crude oil, gallons	10 070
Crude on, gamons	. 12,872
Kerosene, gallons	633
Kerosene, gallons. Number of containers with stegomyla larvæ found.	. 1
Fly breeding places destroyed	. 5
REPORT OF ROUTINE WORK DONE BY HEALTH OFFICE, PANAMA.	
General sanitation:	
Linear feet of ditches cleaned and maintained	74, 400
Linear feet of ditches cleaned and maintained	115
Linear feet of ditches cleaned and maintained	74, 400 115 0
Linear feet of ditches cleaned and maintained. Linear feet of new ditches dug. Number of cubic yards of earth used in filling.	115
Linear feet of ditches cleaned and maintained. Linear feet of new ditches dug. Number of cubic yards of earth used in filling. Gallons of larvacide used. Gallons of crude oil used.	935 6, 040
Linear feet of ditches cleaned and maintained. Linear feet of new ditches dug. Number of cubic yards of earth used in filling. Gallons of larvacide used. Gallons of crude oil used.	935 6, 040
Linear feet of ditches cleaned and maintained. Linear feet of new ditches dug. Number of cubic yards of earth used in filling. Gallons of larvacide used. Gallons of crude oil used.	935 6, 040
Linear feet of ditches cleaned and maintained. Linear feet of new ditches dug. Number of cubic yards of earth used in filling. Gallons of larvacide used. Gallons of crude oil used. Gallons of kerosene used. Square yards of pools oiled.	935 6, 040 173 471, 940
Linear feet of ditches cleaned and maintained. Linear feet of new ditches dug. Number of cubic yards of earth used in filling. Gallons of larvacide used. Gallons of crude oil used. Gallons of kerosene used. Square yards of pools oiled. Water containers treated	935 6,040 173 471,940 10,685
Linear feet of ditches cleaned and maintained. Linear feet of new ditches dug. Number of cubic yards of earth used in filling. Gallons of larvacide used. Gallons of roude oil used. Gallons of werosene used. Square yards of pools oiled. Water containers treated. Mosquitto breeding places found (Stepomyia 128).	115 0 935 6,040 173 471,940 10,685 329
Linear feet of ditches cleaned and maintained. Linear feet of new ditches dug. Number of cubic yards of earth used in filling. Gallons of larvacide used. Gallons of roude oil used. Gallons of werosene used. Square yards of pools oiled. Water containers treated. Mosquitto breeding places found (Stepomyia 128).	115 0 935 6,040 173 471,940 10,685 329 54
Linear feet of ditches cleaned and maintained Linear feet of new ditches dug. Number of cubic yards of earth used in filling. Gallons of larvacide used. Gallons of crude oil used. Gallons of kerosene used. Square yards of pools oiled. Water containers treated. Mosquito breeding places found (Stegomyia 128) Fly breeding places found Flies trapped (13,000 per quart).	115 0 935 6,040 173 471,940 10,685 329 54 100
Linear feet of ditches cleaned and maintained Linear feet of new ditches dug Number of cubic yards of earth used in filling. Gallons of larvacide used Gallons of revide oil used Gallons of everosene used Square yards of pools oiled Water containers treated Mosquito breeding places found (Stegomyia 128) Fly breeding places found Flies trapped (13,000 per quart) Number of rats killed	115 0 935 6,040 173 471,940 10,685 329 54 100 927
Linear feet of ditches cleaned and maintained Linear feet of new ditches dug. Number of cubic yards of earth used in filling. Gallons of larvacide used. Gallons of series used. Gallons of kerosene used. Square yards of pools oiled. Water containers treated. Mosquito breeding places found (Stegomyia 128). Fly breeding places found. Flies trapped (13,000 per quart). Number of rats killed. Number of roun disinfections made.	115 0 935 6,040 173 471,940 10,685 329 54 100 927 25
Linear feet of ditches cleaned and maintained Linear feet of new ditches dug. Number of cubic yards of earth used in filling. Gallons of larvacide used. Gallons of series used. Gallons of kerosene used. Square yards of pools oiled. Water containers treated. Mosquito breeding places found (Stegomyia 128). Fly breeding places found. Flies trapped (13,000 per quart). Number of rats killed. Number of roun disinfections made.	115 0 935 6,040 173 471,940 10,685 329 54 100 927 25
Linear feet of ditches cleaned and maintained Linear feet of new ditches dug. Number of cubic yards of earth used in filling. Gallons of larvacide used. Gallons of roude oil used. Gallons of servesene used. Square yards of pools oiled. Water containers treated. Mosquito breeding places found (Stegomyia 128) Fly breeding places found Flies trapped (13,000 per quart). Number of rats killed. Number of room disinfections made. Square feet of vegetation removed.	115 0 935 6,040 173 471,940 10,685 329 54 100 927 25
Linear feet of ditches cleaned and maintained Linear feet of new ditches dug Number of cubic yards of earth used in filling. Gallons of larvacide used Gallons of revide oil used Gallons of exception of earth used Gallons of exception of ex	115 0 935 6, 040 173 471, 940 10, 685 329 54 100 927 25 331, 900
Linear feet of ditches cleaned and maintained Linear feet of new ditches dug Number of cubic yards of earth used in filling. Gallons of larvacide used Gallons of revide oil used Gallons of exception of earth used Gallons of exception of ex	115 0 935 6,040 10,685 329 54 100 927 25 331,900 4,375
Linear feet of ditches cleaned and maintained Linear feet of new ditches dug Number of cubic yards of earth used in filling. Gallons of larvacide used Gallons of served collused Gallons of exception used Gallons of werosene used Square yards of pools oiled Water containers treated. Mosquito breeding places found (Stegomyia 128) Fly breeding places found Flies trapped (13,000 per quart) Number of rats killed. Number of room disinfections made. Square feet of vegetation removed. Garbage collection: Number of loads of garbage removed to dump. Number of cloads of garbage removed to dump.	115 0 935 6, 040 173 471, 940 10, 685 54 100 927 25 331, 900 4, 375 9, 366
Linear feet of ditches cleaned and maintained Linear feet of new ditches dug. Number of cubic yards of earth used in filling. Gallons of larvacide used. Gallons of rerde oil used. Gallons of kerosene used. Square yards of pools oiled Water containers treated. Mosquito breeding places found (Stegomyia 128). Fly breeding places found. Flies trapped (13,000 per quart). Number of rats killed. Number of room disinfections made. Square feet of vegetation removed. Garbage collection: Number of loads of garbage removed to dump. Number of cubic yards of garbage removed to dump. Number of cubic yards of garbage removed to dump. Total number of cans of garbage emptied.	115 0 935 6,040 10,685 329 54 100 927 25 331,900 4,375
Linear feet of ditches cleaned and maintained Linear feet of new ditches dug Number of cubic yards of earth used in filling. Gallons of larvacide used Gallons of served oil used Gallons of servesene used Square yards of pools oiled Water containers treated. Mosquito breeding places found (Stegomyia 128) Fly breeding places found Flies trapped (13,000 per quart) Number of rats killed. Number of room disinfections made. Square feet of vegetation removed. Garbage collection: Number of loads of garbage removed to dump. Number of cans of garbage removed to dump. Total number of cans of garbage emptied. Buildings:	115 0 935 6,040 173 471,940 10,685 329 54 100 927 25 331,900 4,375 9,366 42,701
Linear feet of ditches cleaned and maintained Linear feet of new ditches dug Number of cubic yards of earth used in filling. Gallons of larvacide used Gallons of served oil used Gallons of servesene used Square yards of pools oiled Water containers treated. Mosquito breeding places found (Stegomyia 128) Fly breeding places found Flies trapped (13,000 per quart) Number of rats killed. Number of room disinfections made. Square feet of vegetation removed. Garbage collection: Number of loads of garbage removed to dump. Number of cans of garbage removed to dump. Total number of cans of garbage emptied. Buildings:	115 0 935 6, 040 173 471, 940 10, 685 54 100 935 54 100 935 329 54 100 935 42, 701 4, 504
Linear feet of ditches cleaned and maintained Linear feet of new ditches dug Number of cubic yards of earth used in filling. Gallons of larvacide used Gallons of served oil used Gallons of servesene used Square yards of pools oiled Water containers treated. Mosquito breeding places found (Stegomyia 128) Fly breeding places found Flies trapped (13,000 per quart) Number of rats killed. Number of room disinfections made. Square feet of vegetation removed. Garbage collection: Number of loads of garbage removed to dump. Number of cans of garbage removed to dump. Total number of cans of garbage emptied. Buildings:	115 0 935 6, 040 173 471, 940 10, 685 104 10927 25 331, 900 4, 375 9, 366 42, 701 4, 504
Linear feet of ditches cleaned and maintained Linear feet of new ditches dug Number of cubic yards of earth used in filling. Gallons of larvacide used Gallons of revade oil used Gallons of everosene used Square yards of pools oiled Water containers treated Mosquito breeding places found (Stegomyia 128) Fly breeding places found Flies trapped (13,000 per quart) Number of rats killed Number of room disinfections made. Square feet of vegetation removed. Garbage collection: Number of loads of garbage removed to dump. Number of coulcy yards of garbage removed to dump. Total number of cans of garbage emptied. Buildings: Number of buildings inspected Number of plans for new buildings approved Number of plans for new buildings approved Number of purits issued for repairs to old buildings	115 0 935 6, 040 173 471, 940 10, 685 329 54 100 927 25 331, 900 4, 375 9, 366 42, 701 4, 504 167 167 167 167 167 167 167 167
Linear feet of ditches cleaned and maintained Linear feet of new ditches dug Number of cubic yards of earth used in filling. Gallons of larvacide used Gallons of revade oil used Gallons of everosene used Square yards of pools oiled Water containers treated Mosquito breeding places found (Stegomyia 128) Fly breeding places found Flies trapped (13,000 per quart) Number of rats killed Number of room disinfections made. Square feet of vegetation removed. Garbage collection: Number of loads of garbage removed to dump. Number of coulcy yards of garbage removed to dump. Total number of cans of garbage emptied. Buildings: Number of buildings inspected Number of plans for new buildings approved Number of plans for new buildings approved Number of purits issued for repairs to old buildings	115 935 6,040 173 471,940 10,685 329 927 331,900 4,375 9,366 42,701 4,504 13 67
Linear feet of ditches cleaned and maintained Linear feet of new ditches dug Number of cubic yards of earth used in filling. Gallons of larvacide used Gallons of larvacide used Gallons of serosene used Square yards of pools oiled Water containers treated. Mosquito breeding places found (Stegomyia 128) Fly breeding places found Flies trapped (13,000 per quart) Number of rats killed. Number of room disinfections made. Square feet of vegetation removed. Garbage collection: Number of loads of garbage removed to dump. Number of cubic yards of garbage removed to dump. Total number of cans of garbage removed to dump. Total number of com garbage removed to dump. Number of buildings inspected. Number of plans for new buildings approved. Number of plans for new buildings approved. Number of permits issued for repairs to old buildings. Total building permits issued.	115 0 935 6, 040 173 471, 940 10, 685 329 54 100 927 25 331, 900 4, 375 9, 366 42, 701 4, 504 167 167 167 167 167 167 167 167
Linear feet of ditches cleaned and maintained Linear feet of new ditches dug Number of cubic yards of earth used in filling. Gallons of larvacide used Gallons of larvacide used Gallons of serosene used Square yards of pools oiled Water containers treated. Mosquito breeding places found (Stegomyia 128) Fly breeding places found Flies trapped (13,000 per quart) Number of rats killed. Number of room disinfections made. Square feet of vegetation removed. Garbage collection: Number of loads of garbage removed to dump. Number of cubic yards of garbage removed to dump. Total number of cans of garbage removed to dump. Total number of com garbage removed to dump. Number of buildings inspected. Number of plans for new buildings approved. Number of plans for new buildings approved. Number of permits issued for repairs to old buildings. Total building permits issued.	115 935 6,040 173 471,940 10,685 329 927 331,900 4,375 9,366 42,701 4,504 13 67
Linear feet of ditches cleaned and maintained Linear feet of new ditches dug Number of cubic yards of earth used in filling. Gallons of larvacide used Gallons of revade oil used Gallons of everosene used Square yards of pools oiled Water containers treated Mosquito breeding places found (Stegomyia 128) Fly breeding places found Flies trapped (13,000 per quart). Number of rats killed Number of room disinfections made. Square feet of vegetation removed Garbage collection: Number of loads of garbage removed to dump. Number of cubic yards of garbage removed to dump. Total number of cans of garbage removed to dump. Total number of cans of garbage emptied Buildings: Number of buildings inspected Number of plans for new buildings approved Number of permits issued Number of buildings condemneed Number of buildings condemneed	115 935 6,040 471,940 10,685 329 54 100 927 331,900 4,375 9,366 42,701 4,504 100 67 80 100 100 100 100 100 100 100
Linear feet of ditches cleaned and maintained Linear feet of new ditches dug Number of cubic yards of earth used in filling. Gallons of larvacide used Gallons of serosene used Square yards of pools oiled. Water containers treated. Mosquito breeding places found (Stegomyia 128) Fly breeding places found Flies trapped (13,000 per quart). Number of room disinfections made. Square feet of vegetation removed. Garbage collection: Number of loads of garbage removed to dump. Number of cubic yards of garbage emptied Buildings: Number of buildings inspected Number of plans for new buildings approved Number of permits issued for repairs to old buildings. Total building permits issued. Number of buildings condemned Number of stables condemned Number of stables condemned. Number of stables condemned. Number of stables condemned.	115 935 6,040 10,685 329 54 100 95 25 331,900 4,375 9,366 42,701 4,504 67 80
Linear feet of ditches cleaned and maintained Linear feet of new ditches dug Number of cubic yards of earth used in filling. Gallons of larvacide used Gallons of revade oil used Gallons of everosene used Square yards of pools oiled Water containers treated Mosquito breeding places found (Stegomyia 128) Fly breeding places found Flies trapped (13,000 per quart). Number of rats killed Number of room disinfections made. Square feet of vegetation removed Garbage collection: Number of loads of garbage removed to dump. Number of cubic yards of garbage removed to dump. Number of cubic yards of garbage removed to dump. Total number of cans of garbage removed to dump. Total number of cans of garbage emptied Buildings: Number of buildings inspected Number of plans for new buildings approved Number of permits issued for repairs to old buildings. Total building permits issued. Number of buildings condemned Number of buildings demolished. Street cleaning:	115 935 6,040 173 471,940 10,685 3471,940 927 25 331,900 4,375 9,366 42,701 4,504 13 67 67 68 10 10 10 10 10 10 10 10 10 10
Linear feet of ditches cleaned and maintained Linear feet of new ditches dug. Number of cubic yards of earth used in filling. Gallons of larvacide used. Gallons of ravads of lavads. Gallons of kerosene used. Square yards of pools olled. Water containers treated. Mosquito breeding places found (Stegomyia 128). Fly breeding places found. Flies trapped (13,000 per quart). Number of rats killed. Number of rats killed. Number of room disinfections made. Square feet of vegetation removed. Garbage collection: Number of loads of garbage removed to dump. Number of cubic yards of garbage removed to dump. Number of cubic yards of garbage removed to dump. Total number of cans of garbage removed to dump. Total number of plans for new buildings approved. Number of permits issued for repairs to old buildings. Total building permits issued. Number of buildings condemned. Number of buildings condemned. Number of stables condemned. Number of buildings demolished. Street cleaning: A verage number of square yards of streets cleaned dally.	115 0 935 6, 040 10, 685 329 54 100 927 25 331, 900 4, 375 9, 366 42, 701 4, 504 13 67 80 10 600, 000
Linear feet of ditches cleaned and maintained Linear feet of new ditches dug Number of cubic yards of earth used in filling. Gallons of larvacide used Gallons of revole oil used Gallons of everosene used Square yards of pools oiled Water containers treated. Mosquito breeding places found (Stegomyia 128) Fly breeding places found Flies trapped (13,000 per quart) Number of room disinfections made. Square feet of vegetation removed. Garbage collection: Number of loads of garbage removed to dump. Number of loads of garbage removed to dump. Total number of cans of garbage removed to dump. Total number of come in garbage removed. Buildings: Number of buildings inspected Number of plans for new buildings approved. Number of plans for new buildings approved. Number of suildings condemned Number of stables condemned Number of buildings condemned Number of buildings condemned Number of buildings condemned Number of buildings demolished. Street cleaning: Average number of square yards of streets cleaned daily. Average number of square yards of streets sprinkled daily.	115 935 6,040 173 471,940 10,685 54 100 927 25 331,900 4,375 9,366 42,701 4,504 10 00 10 6600,000
Linear feet of ditches cleaned and maintained Linear feet of new ditches dug Number of cubic yards of earth used in filling. Gallons of larvacide used Gallons of revole oil used Gallons of everosene used Square yards of pools oiled Water containers treated. Mosquito breeding places found (Stegomyia 128) Fly breeding places found Flies trapped (13,000 per quart) Number of room disinfections made. Square feet of vegetation removed. Garbage collection: Number of loads of garbage removed to dump. Number of loads of garbage removed to dump. Total number of cans of garbage removed to dump. Total number of come in garbage removed. Buildings: Number of buildings inspected Number of plans for new buildings approved. Number of plans for new buildings approved. Number of suildings condemned Number of stables condemned Number of buildings condemned Number of buildings condemned Number of buildings condemned Number of buildings demolished. Street cleaning: Average number of square yards of streets cleaned daily. Average number of square yards of streets sprinkled daily.	115 935 6,040 10,682 471,940 10,682 54 100 927 331,900 4,375 9,366 42,701 4,504 10 600,000 0
Linear feet of ditches cleaned and maintained. Linear feet of new ditches dug. Number of cubic yards of earth used in filling. Gallons of larvacide used. Gallons of larvacide used. Gallons of serosene used. Square yards of pools oiled. Water containers treated. Mosquito breeding places found (Stegomyia 128). Fly breeding places found. Flies trapped (13,000 per quart). Number of room disinfections made. Square feet of vegetation removed. Garbage collection: Number of loads of garbage removed to dump. Number of loads of garbage removed to dump. Number of cubic yards of garbage removed to dump. Number of buildings inspected. Number of buildings inspected. Number of permits issued for repairs to old buildings. Total building permits issued. Number of stables condemned. Number of stables condemned. Number of stables condemned. Number of private properties cleaned daily. Average number of square yards of streets cleaned daily. Average number of square yards of streets sprinkled daily. Number of private properties cleaned during month. Number of private properties cleaned during month. Number of private properties cleaned during month.	115 935 6,040 173 471,940 10,685 54 100 927 25 331,900 4,375 9,366 42,701 4,504 10 00 10 6600,000
Linear feet of ditches cleaned and maintained Linear feet of new ditches dug Number of cubic yards of earth used in filling. Gallons of larvacide used Gallons of revade oil used Gallons of everosene used Square yards of pools oiled Water containers treated Mosquito breeding places found (Stegomyia 128) Fly breeding places found Flies trapped (13,000 per quart) Number of rats killed Number of room disinfections made. Square feet of vegetation removed. Garbage collection: Number of loads of garbage removed to dump. Number of loads of garbage removed to dump. Number of cubic yards of garbage removed to dump. Total number of cans of garbage removed to dump. Number of buildings inspected Number of plans for new buildings approved Number of plans for new buildings approved Number of buildings condemned Number of buildings condemned Number of buildings demolished. Street cleaning: A verage number of square yards of streets cleaned daily. A verage number of square yards of streets cleaned daily. Number of private properties cleaned during month Number of puisance notices served and nuisances abated	115 935 6,040 107 471,940 10,685 329 54 100 927 331,900 4,375 9,366 42,701 4,504 100 100 100 100 100 100 100 1
Linear feet of ditches cleaned and maintained. Linear feet of new ditches dug. Number of cubic yards of earth used in filling. Gallons of larvacide used. Gallons of larvacide used. Gallons of serosene used. Square yards of pools oiled. Water containers treated. Mosquito breeding places found (Stegomyia 128). Fly breeding places found. Flies trapped (13,000 per quart). Number of room disinfections made. Square feet of vegetation removed. Garbage collection: Number of loads of garbage removed to dump. Number of loads of garbage removed to dump. Number of cubic yards of garbage removed to dump. Number of buildings inspected. Number of buildings inspected. Number of permits issued for repairs to old buildings. Total building permits issued. Number of stables condemned. Number of stables condemned. Number of stables condemned. Number of private properties cleaned daily. Average number of square yards of streets cleaned daily. Average number of square yards of streets sprinkled daily. Number of private properties cleaned during month. Number of private properties cleaned during month. Number of private properties cleaned during month.	115 935 6,040 10,685 329 54 100 927 331,900 4,375 9,366 42,701 4,504 67 80 10 600,000 0

MONTHLY WORK REPORT FOR COLON-CRISTOBAL, AND MOUNT HOPE.

Sanitation, Colon-Cristobal:	
Square yards street cleaned.	3, 745, 848
Square yards alleys maintained	624,000
Number of private properties cleaned	738
Square yards alleys maintained Number of private properties cleaned. Cubic feet fumigated	6, 272
Doses of quinine issued	6, 435
Number of dogs caught	130
Number of dogs killed	21
Number of rats caught	336
Number of rats caught. Loads of yard garbage disposed of Number of cans garbage (cubic yards, 2,505)	576
Number of cans garbage (cubic yards, 2,505)	13, 958
Coton dump maintained.	
Linear yards of ditches constructed	
Linear yards of ditches maintained	1, 116
Acres of vegetation removed—	
Quarantine station. Cristobal (Panama R. R. reservation).	8
Cristobal (Panama R. R. reservation)	$\frac{4\frac{1}{2}}{2}$
Washington Hotel	$\frac{2}{2}^{*}$
Colon Hospital	
Panama R. R. reservation, Colon (swamp)	40
Panama R. R. reservation, Colon (swamp) Parkway and E Street maintained.	
Square yards oiled	45,325
Number of receptacles treated	46, 960
Number of mosquitoes caught in Colon Hospital screens—	
Parkway and E Street maintained. Square yards oiled. Number of receptacles treated. Number of mosquitoes caught in Colon Hospital screens— Anopheles. Culex.	8
Culex	3, 210
Number of mosquito breeding places destroyed Number of fly-breeding places destroyed Number of buildings inspected Number of gallons of larvacide used in Colon	2
Number of fly-breeding places destroyed	6
Number of buildings inspected	10, 285
Number of gallons of larvacide used in Colon	156.08
Number of gallons of crude off used in Colon	1,175
Number of nuisances abated	347
Building—Colon: Number of building plans approved.	
Number of building plans approved	3
Number of permits to occupy issued	12
Number of permits to repair issued	52
Number of bills collected	134
Sewers—Colon:	
Number of new connections made during the month	
Total number of connections made to date.	1,361
Number of houses on which connections were made	32
Outstanding permits	32
Sanitation, Cristobal:	12 050
Number of cans garbage (cubic yards 705)	13, 958 194
Loads of yard garbage handled. Square yards oiled. Number of receptacles treated. Number of mosquito breeding places destroyed. Number of fly-breeding places destroyed.	6,905
Number of recentagles treated	5,700
Number of measuite breeding places destroyed	3, 700
Number of fix breeding places destroyed	ő
Gallons of larvacide used.	3
Gallons of crude oil used.	225
Number of buildings inspected.	1,330
Number of nuisances abated.	39
Sanitation, Mount Hope:	00
Number of cans garbage (cubic yards 102)	780
Square yards oiled	124,000
Number of doses of quinine issued	674
Number of recentacles treated	12, 150
Number of mosquito places destroyed	94
Number of mosquitoes caught—	
Anopheles—	
Barracks	20
Mount Hope village	30
Total anopheles	50
-	

Sanitation, Mount Hope—Continued. Number of mosquitos caught—Continued.	
	3, 190 1, 5 72 1
Mount Hope village. Camp Beird cars	225 131
Gallons of larvacide used. Gallons of crude oil used. Mount Hope cemetery maintained	5, 119 50 3, 109. 9
Linear yards ditches constructed Linear yards ditches maintained S Square yards of vegetation removed 125 Number of burials during the month 125	9, 650 5, 200 40
TABLE XVIII.—CONSOLIDATED REPORT OF QUARANTINE T ACTIONS AT THE PORTS OF BALBOA-PANAMA AND C	
CRISTOBAL FOR THE MONTH OF NOVEMBER, 1916.	
Number of vessels inspected and passed	203 16
Total number of vessels entered.	219
Number of special inspections made to enforce compliance with antiplague and mosquito-breeding regulations Number of vessels fumigated on arrival Number of vessels fumigated on departure. Number of vessels detained but sailed in quarantine	126 20 1
=	
Number of crew examined. Number of stowaways examined. Number of passengers examined.	11,909 5 4,526
	16,440
Number of supplementary examinations	3,141
Number of persons vaccinated at port of arrival because of compulsory-vaccination law. Number of persons vaccinated at port of departure.	228
Number of persons vaccinated at port of departure	1,283
Number of persons held in quarantine at the detention houses to complete period of incubation of yellow fever and plague	290
Number of persons held in quarantine on board vessels	
=	1,903
Total number of persons landed from foreign ports: Cabin. Steerage.	1,970 1,650
	3,620
Total number of persons embarked for foreign ports: Cabin	1,517 1,511
Steerage	3,028
Total number of persons arriving from coast towns.	
Apparent increase for month from coast towns	207

Apparent increase for month from foreign ports: Cabin Steerage		453 139
		592
Number of clearances issued. Number of bills of health issued or viséed. Number of inspections of docks. Number of inspections of vessels at docks. Number of immigrants rejected and deported.		10
Total number of persons landed. Less number for Pacific ports.		5,240 260
Total number of persons sailing		4,980 4,441
Apparent increase for month		539
IMMIGRATION REPORT FOR COLON AND C	RISTOB	AL.
From—	Cabin.	Steerage.
Europe. United States. Jamaica and West Indies Venezuela. Colombia. Cuba. Costa Rica. Bocas del Toro. Coast towns.	9 808 44 6 82 64 115 39 0	8 436 155 0 129 16 48 148 172
	1,167	1,112
Grand total	2,	279
Men Women. Children United States troops. Unclassified Total.		556 256 412
QUARANTINE TRANSACTIONS AT THE PORT TORO, PANAMA.	OF BOC	AS DEL
Number of vessels inspected and passed. Number of crew inspected and passed. Number of passengers inspected and passed. Number of passengers, transit, inspected and passed. An epidemic of mumps exists at Bocas del Toro at the presentinable disease has appeared in this port, and the health condisurrounding territory continue good.	t time.	1,367 258 110
TABLE XIX.—STATEMENT OF QUININE I	SSUED.	
Quinine sulphate (kilos). Pounds, avoirdupois.		3.00 6.61

53

TABLE XX .-- PERSONNEL REPORT.

	Nov., 1916.		Oct., 1916	Nov.,1915	
	Gold employees.	Silver em- ployees.	Total employees.		(total employees).
Chief health officer Medical storehouse. Quarantine division Health office, Panama Health office, Colon Ancon Hospital Colon Hospital Santo Tomas Hospital Palo Seco Leper Asylum Zone sanitation Hospital farm Dispensaries:	13 13 9 125 16 6 2 7 2	4 33 151 154 235 26 39 117 67	3 8 46 164 163 360 42 6 41 124 65	4 8 46 152 160 367 41 6 35 124 51	4 10 43 176 195 337 37 6 30 146 51
BalboaCorozal		3	8	8	7
Gamboa Gatun Paraiso Pedro Miguel	1 2 2 2	2 2 1	1 4 4 3	1 4 4 3	5 4 3
Total	212	834	1,046	1,014	1,059









